

INDUSTRIAL FACT SHEET

Summer 2001

I. Sector Description and Definition

The importance of the industrial sector is not always apparent. The food, flowers, and other items people use every day were made, stored, or distributed by Boston's industrial businesses. The success of industrial businesses is essential to the success of virtually every business sector in Boston, including services, restaurants, medical institutions, and tourism. We have broken down the industrial sector according to the following classification categories:

- **Manufacturing.** These businesses engage in the mechanical or chemical transformation of materials or substances into new products. Establishments engaged in assembling component parts of manufactured products are also considered manufacturing businesses.
- **Industrial Character.** These businesses may not create a product but, based on their land use needs, they do have industrial character. Examples are companies that provide services such as wholesale trade, food processing, construction, warehousing, and auto and appliance.
- **Distribution.** These businesses move products from producers to consumers via air, water, rail, and highway transportation.



II. Job Opportunities and Salaries

The Industrial Sector is an important provider of jobs to Boston residents. In 2000, there were 18,000 jobs in manufacturing and 12,000 jobs in wholesale trade. These jobs typically pay higher wages than other sectors, and they provide benefits such as insurance. Here's information on the sector's wide range of job opportunities and pay scales in Boston.

Sector	# of Employees	Average Yearly Wage
Manufacturing	18,442	\$ 48,775
Computer/Electronics	2,535	92,830
Metal Fabrication	2,326	49,956
Printing	2,022	44,169
Food Processing	3,046	27,784
Apparel	1,574	6,056
Wholesale Trade	12,351	\$ 63,038
Construction	16,176	\$ 59,261
All Payroll Jobs	571,117	\$ 53,874

*2000 Employment Data for Suffolk County

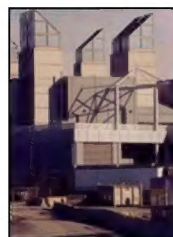
III. Major Employers

Major employers of manufacturing jobs in Boston include Gillette, New Balance, and Dutchmaid Bakery. However, it is important to note that across Massachusetts, 81% of manufacturing establishments employ fewer than 50 employees.

Company	# of employees
• Gillette Company	3,500
• Houghton Mifflin	943
• Dutchmaid Bakery	150



Allston/Brighton



East Boston



South Boston

Table of Contents

Workforce Training Issues.....2
Sector Trends and Issues.....2
State Budget Update.....3

Institutional Master Plans.....3
In the Neighborhoods.....3
BRA Planning Initiatives.....4

Citywide Initiatives.....4
Pipeline Projects.....5
Research.....6

IV. Related Industries

Hotels & Retail. Most of the hotels, restaurants, and retail establishments receive their goods and services from industrial sector businesses such as food processors, commercial laundry, the Flower Exchange, and bakeries.

Health & Medical. Medical institutions rely on manufacturers to produce medical devices as well as to manufacture pharmaceutical and biotechnology products.

V. Education and Training Issues

Education. Manufacturing/industrial jobs continue to draw immigrants just entering the workforce as well as those workers who may not be able to compete successfully in other industries because they lack a high school diploma or equivalency. Spanish is the dominant language among immigrant workers in Boston's manufacturing sector.

Rapidly Growing Population. Immigrants have accounted for all of the net growth in the state's labor force over the last ten years and are a rapidly growing segment of the population. Since 1990, more than 250,000 new immigrants have arrived in Massachusetts. Immigrants with limited English speaking abilities earn 24% less than their employed counterparts who are fluent in English. Many immigrants struggle with poor English skills and limited formal schooling.

Dropouts. High school dropouts face greater challenges in the workplace than any other demographic group. Families headed by someone with a high school diploma earn almost 50% more than families headed by a high school dropout. Like immigrants, those lacking a basic high school credential are extremely vulnerable to future changes in the labor market.

Language Barrier. Manufacturing/industrial jobs continue to wane in Boston and throughout the state.

- Over the last year, JCS has worked to help nearly 300 immigrant Chinese workers displaced from a manufacturing plant previously located in Allston/Brighton that relocated its business out of the country. Low English speaking skills prevented these workers from seeking reemployment in other sectors. Mayor Menino worked with the state to bring in federal resources for intensive ESL classes as a complement to unemployment insurance.
- Currently, there is a similar situation with 270 Haitian and Latino workers who recently lost their manufacturing jobs in the same neighborhood. Once again, the city has applied for Federal relief, but public resources are rapidly shrinking.
- The adult literacy system, funded primarily by the Commonwealth's Department of Education, currently meets about 3% of the need and demand for adult basic education.
- ESL classes sited in the community typically have a two-year wait list.



OPPORTUNITIES

Manufacturing/industrial companies employing immigrants and those workers lacking high school credentials present opportunities to offer work and learning for individuals who may need a "second chance," thereby enabling workers to advance or move on to new jobs.

In a partnership with the Commonwealth's Department of Education (DOE), the Mayor's Office of Jobs and Community Services (JCS) manages and distributes funds to local community groups to provide adult basic education. These programs allow individuals without a high school credential to study for and receive a GED. For those with low English language skills these programs offer a range of skill level classes. Adults with literacy and numeracy deficiencies also enroll to enhance their ability to access higher wage jobs and specialized occupational training requiring high school level reading and math proficiency. The city's Empowerment Zone office and the Office of New Bostonians contribute additional funds to Boston's literacy infrastructure for special target populations. JCS's literacy funding picture for fiscal year 2003 is as follows:

Programs	Funds
Adult Basic Education (Ma Dept. of Education)	\$927,098
Adult Basic Education (HUD/CDBG)	\$580,800
Adult Basic Education (HUD/EZ)	\$485,954
English for New Bostonians (Neigh.Jobs Trust)	\$250,000
ESOL Integrated with Skills Training (HUD/EZ)	\$170,000
Family Literacy (HUD/CDBG)	\$118,750
English for Employment (State/DTA)	\$ 85,539
TOTAL	\$2,618,141

VI. Sector Trends and Issues

Towards a Service-Based Economy. Prior to the 1960s, the industrial sector provided a majority of Boston's jobs, and land used for industrial purposes dominated the city's commercial landscape. Since the 1960s, however, Boston's economy has undergone a transformation to a service-based economy. As a result, Boston's manufacturing and wholesale trade sectors lost 76,631 jobs since 1969, at which time these jobs comprised about 20% of the total jobs in the city. In 1969, there were 72,895 manufacturing jobs and 43,173 wholesale trade jobs. An overall decline in manufacturing jobs in the United States, larger space demands, and lower rents in the suburbs have contributed to the decline of Boston's industrial sector. In 2002, there were 23,058 jobs in manufacturing and 16,379 jobs in wholesale trade.

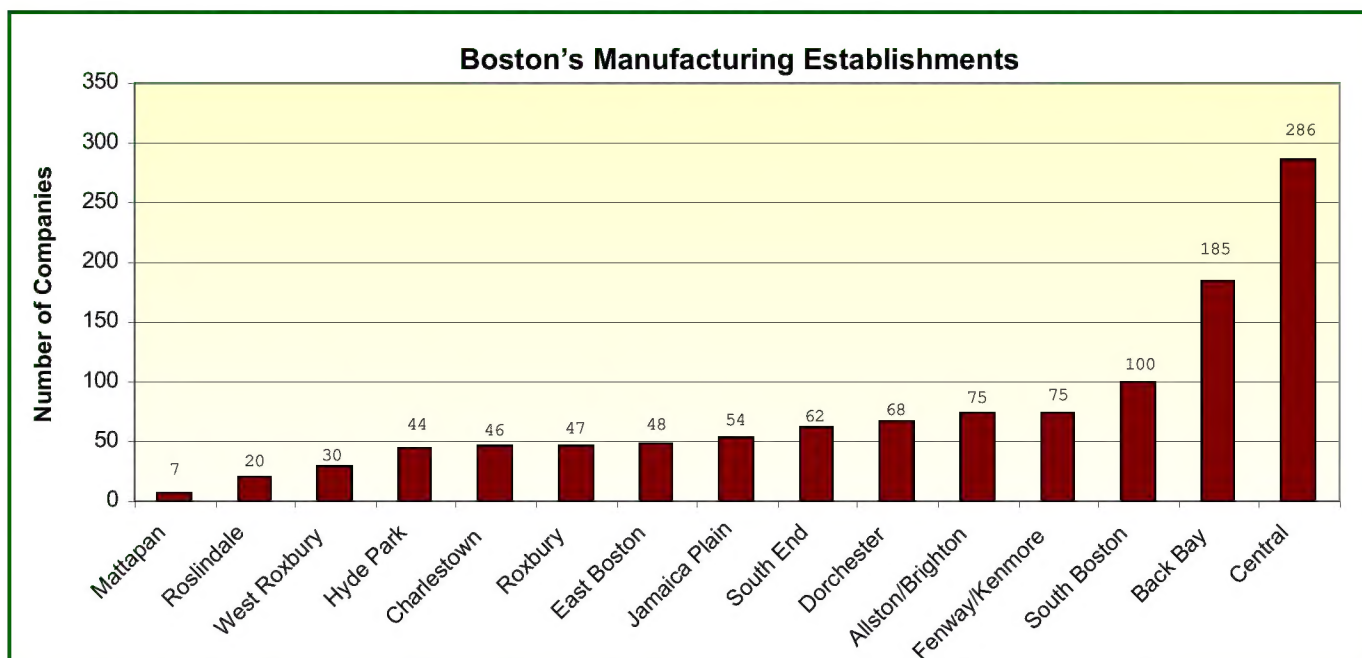


Land Uses. Today, Boston's land is classified primarily for residential and commercial uses. Only 5% (68 million square feet not including Logan Airport or public uses) is zoned industrial. This represents a decline of 38% since 1962. The result of competition for land uses is an uncomfortable relationship between residential and industrial space which the BRA is seeking to ameliorate via the creation of buffer areas.

Overall Decline. As discussed earlier, there has been a decline in both industrial jobs and industrial land in Boston. This is due to not only a decline of the overall industrial sector in the United States but also a robust local residential market and unchecked conversions of industrial space to residential and commercial use.

VII. In the Neighborhoods

It is important to recognize that while a majority of industrial businesses are located in downtown Boston, these businesses are also located throughout Boston's neighborhoods. This has led to tensions among residential and industrial stakeholders as several former industrial sites are in the process of being converted to residential developments. The Back Streets program works to retain industrial land as an important economic component of the city's neighborhoods and continues to seek a balanced approach to land use policy where residential, industrial, and buffer areas can successfully coexist.



Source: Manufacturing in Boston 2002: Product Types and Locations in Boston and Its Neighbors, BRA Report #553.

VIII. BRA/EDIC Planning Initiatives

Back Streets Initiative. An economic development initiative designed to support industrial businesses in Boston, the Back Streets Program provides a range of comprehensive industrial planning services, including area and development planning services to improve operational efficiency and profitability and to conceptualize expansion and development opportunities. The program includes District Business Managers that serve as direct liaisons between Back Streets businesses and City Hall agencies.

Boston Local Development Corporation and Boston Industrial Development Financing Authority. These programs offer financing assistance in the form of loans and tax-exempt bonds to Back Streets businesses.

EDIC Industrial Parks. The EDIC of Boston has an active role in the preservation and creation of industrial jobs in the industrial parks it owns and operates. The Boston Marine Industrial Park is 191 acres of land, assembled in 1977 for the purpose of creating jobs and spurring economic growth for maritime and other industries. Today, the BMIP is home to over 3,500 jobs and 180 businesses including printers, fish processors, ship repair, and a brewery. The Alsen Mapes Industrial Park contains manufacturing companies that currently employ over 400 people.

BRA Master Plans & Rezoning. The BRA is actively creating master plans and rezoning initiatives in Boston's neighborhoods. These plans will create a balanced approach to industrial retention in areas facing residential expansion pressures.

BRA Brownfields Program. Offers funding for both assessment and cleanup of contaminated property.



IX. Growth Industries: Biotech, Pharmaceuticals, and Medical Devices

The production of medical devices, pharmaceuticals, and biotech products has been discussed as a potential growth area for Boston. These industries have several components, including research, development, testing, sales, and manufacturing. While several of these components could be attracted to Boston, the BRA, in cooperation with Boston Consulting Group, is currently conducting further research to determine how these industries can best be attracted to urban settings where they will provide quality jobs for existing Boston residents.

"The goal of the Back Streets program is to support Boston's many small and medium-sized industrial and commercial companies by creating the conditions in which they can grow and prosper, and attract new manufacturing and commercial businesses to the city".

~ Mayor Thomas M. Menino ~

PIPELINE PROJECTS			
Project	Neighborhood	Use	SF
Under Construction			
Legal Sea Foods Dutchmaid Bakery	South Boston Dorchester	Seafood Processing Bakery	65,000 47,000
Under Review			
150 McLennan	East Boston	Self-storage	137,000
Project Watch			
Boston Globe	Dorchester	Warehousing	47,000

X. State Initiatives

Mass Tech Collaborative. Offers funding programs for renewable energy technology and conducts research on emerging technology such as the medical device industry.

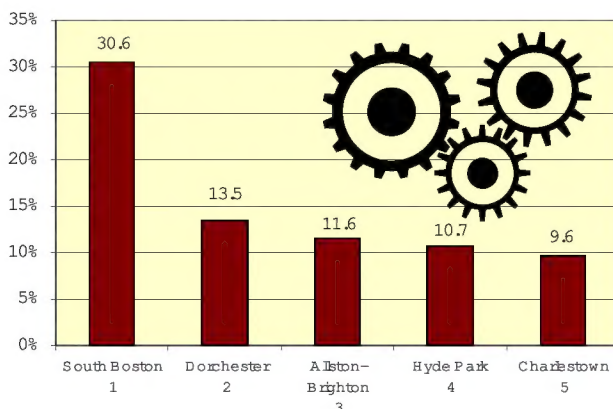
Massachusetts Manufacturing Extension Partnership. Part of a nationwide network that provides solutions to manufacturers including plant layout, process improvements, energy audits, business planning, and product development.

Mass Development Finance. MDFA offers several incentive programs for industrial businesses including:

- *Tax-Exempt 501(C)(3) Bonds* - provide low-cost financing for non-profit organizations and long-term care facilities. For the purchase of land, buildings, and new equipment; to construct or renovate existing buildings; and to refinance existing asset-based, conventional, or tax-exempt debt.
- *Taxable Bonds* - offer flexibility in rates and terms for major industrial and commercial real-estate projects. Also for companies that no longer have access to tax-exempt bonds.
- *Equipment Lease/Purchase Program* - provides manufacturers, non-profit institutions, and environmental enterprises with a low-cost alternative for financing \$300,000 or more in new equipment needs.
- *Brownfields Redevelopment Fund* - finances the remediation of a contaminated site that is being redeveloped into an economically viable project.
- *Seafood Loan Program* - direct loans for fixed asset financing, including the purchase of land, buildings, equipment, and the construction or renovation of facilities related to the seafood industry.
- *Seafood Revolving Loan Fund Program* - direct loans for the expansion of offshore or shoreside seafood enterprises.
- *Industrial Park Financing* - for the development of land, including all necessary roadways and infrastructure needed to construct new business facilities.

Neighborhood Rankings by Percentage of Total Industrial Land

The neighborhoods with the most industrial land are South Boston, Dorchester, Allston/Brighton, Hyde Park, and Charlestown. Today, Boston's land area is classified primarily for residential and commercial uses, with only 5% or 68 million square feet (1,565 acres) considered industrial land.



Industrial Land in the City of Boston



Boston began its life as a peninsula jutting out into Boston Harbor and connected to the mainland by Boston Neck, a narrow strip, now known as Washington Street. Boston was immediately surrounded by new towns, some of which were later annexed to the city. But for the most part, the city was left with no room to expand except into the water, which surrounded it. Land used for industrial purposes once dominated the city's commercial landscape.

Boston's Industrial Spaces: Industrial Land and Building Spaces in Boston and Its Neighborhoods, BRA Report #552.

**Boston Redevelopment Authority
Economic Planning Initiative**

Mark Maloney, Director
Boston Redevelopment Authority

Rebecca Barnes, Chief Planner
City of Boston

Susan Hartnett, Director
Economic Development

Linda Kowalczyk, Deputy Director
Economic Planning

The Economic Planning Initiative's nine interdepartmental teams connect the BRA to industry leaders, issues, and the latest trends in the greater Boston area.

Industrial Sector Team

Dennis Davis
Jill Lacey Griffin
Geoff Lewis
Noah Luskin
Dan Singleton
Charlie Walsh

* former members

Economic Sector Teams
Education
Financial Services, Insurance, Real Estate
Health & Medical
Hotels
Industrial
Professional Services
Retail
Technology
Culture, Sports & Recreation

Research

MA Manufacturing Extension Partnership Web Site, www.massmep.org.

Profiles of Community Planning Areas: San Francisco's Eastern Neighborhoods, San Francisco Planning Department, January 2002.

Industrial Income & Expense Report: 2001 – 2002. National Association of Industrial and Office Properties.

Manufacturing in Boston 2002: Product Types and Locations in Boston and Its Neighbors, BRA Report #553, April 2002.

Boston's Industrial Spaces: Industrial Land and Building Spaces in Boston and Its Neighborhoods, BRA Report #552, February 2002.

The Largest Private Employers in Boston 2001, BRA Report #545, August 2001.

Industrial & Operations Jobs in Boston, BRA Report #520, December 1998.

BRA Research Reports are available free of charge on the BRA website:
www.bostonredevelopmentauthority.org.